Growth and Achievement Report Parent and Student Guide

Understanding Your Child's Academic Progress

How is my child doing? This is a simple question many parents ask when they see a child's test score. There are actually two issues involved when tests are given: Level of Achievement and Growth.

Level of Achievement: Was my child's test score high enough?

Growth: Are my child's test scores improving quickly enough to move up to the next level, keep from falling behind, or catch up?

Growth: The other half of the story. Most tests students take give only a score reflecting something about the level of achievement (pass/fail, A/B/C/D/F grade, etc.). Until recently, Maine elementary students received a single test score in grades 3-8 on the NECAP in the content areas of reading and mathematics and a writing achievement score in grades 5 and 8. Additionally, Maine students receive an achievement score for the MEA science assessment in grades 5 and 8. Based on their performance on these assessments, students receive an *Achievement Level* - label or descriptor of "Proficient With Distinction", "Proficient", "Partially Proficient", or "Substantially Below Proficient". Achievement levels provide only one part of the story - a snapshot of performance at a single point in time. But we need to recognize students' progress towards a higher achievement level, even if they are not quite there yet – a growth indicator adds that dimension.

The other half of the story is each child's growth in learning. Growth shows success in the education system, because it shows us where positive change is happening for students, districts, and schools.

The Maine Growth Model, is based on the Colorado Growth Model, measures the academic progress each student has made in a year. However, instead of just saying how many points a student has gained or lost since the previous year, the model tells us how a student's progress compares to other students with a similar NECAP or MEA score history. These student growth percentile scores range from 1 (lowest growth) to 99 (highest growth). Percentiles are not percent correct scores, and do not tell us anything about students' "snapshot" achievement levels. Even students with low test scores can get high student growth percentiles, if they had made progress since the previous year's test as compared to their peers. For example, in the sample chart, on the following page, this student's relative reading score between 2009 and 2010 went up (from 740 in grade 7 to 858 in grade 8), and this students' growth percentile was 96. The growth was therefore as high as or higher than 96 percent of other students at a similar level of proficiency; in other words, only 4% of similar students progressed more than this student. A 50th percentile growth score is right in the middle, so it's a typical growth score across the state.

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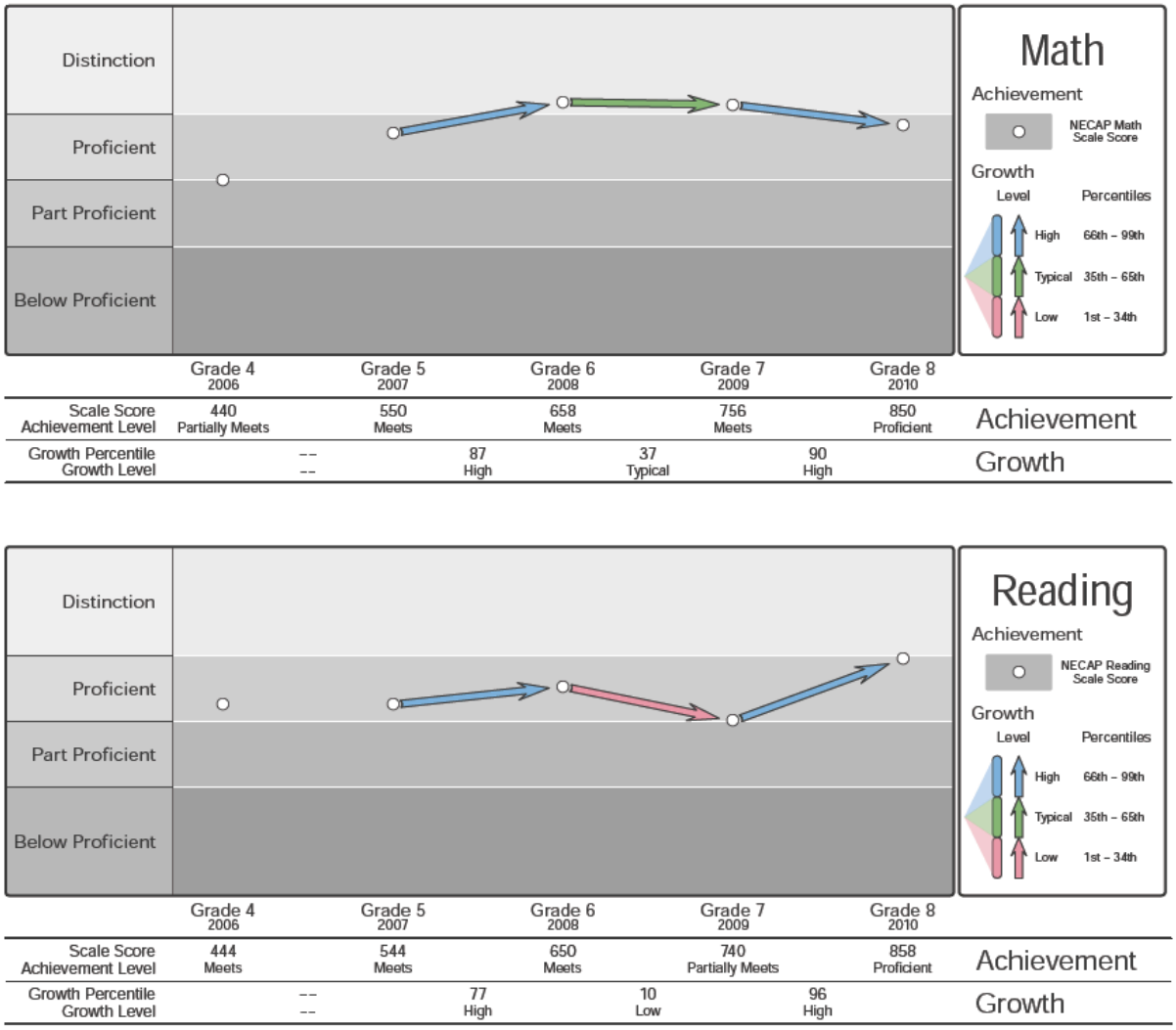

Figure 1. Student Level Growth Model Chart – Math and Reading

In Figure 1, above, the student showed a drop in relative score in mathematics from grade 7 (756) to grade 8 (850), however, scored in the 90th percentile for growth. This demonstrates how the color of the arrow is the critical piece to the Growth Model. In other words, even though the relative achievement level dropped, the student showed the highest level of growth in comparison to his or her peers (blue arrow). A red arrow indicates that a student's growth is low; green indicates typical growth, while blue shows high growth. Typical growth, denoted by a green arrow, falls within the 35th - 65th percentile; high growth, represented by a blue arrow, is any percentile greater than the 65th percentile; and finally low growth, the red arrow, is any percentile less than the 35th percentile. Again, this is a measure relative to peers who scored within the same score range in the previous year. The sixth grade mathematics score was 658. This student's growth is measured against students with a similar sixth grade score, throughout the State, and then the growth percentile is determined accordingly. The student showed typical growth in math, from sixth grade to seventh grade, as compared to his or her peers.

The sample chart above will help you to understand how to interpret your child's academic growth. We hope that this report, along with your child's growth scores will help you see your child's academic progress in a new and more useful way. This new academic growth report can form the basis of fresh, better-informed conversations with your child's school and teachers because it is more than just a snapshot of what has already happened.

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How to understand an individual student growth and achievement report

The first question that needs to be answered is: ***What is growth?***

For individual students, growth is a measure of progress in academic achievement. In Maine's growth model, growth is not measured by test score points, but in percentile gain. This calculation is made by utilizing a statistical model called *quantile regression.* The student growth percentile score demonstrates the student's test score change from one year to the next, compared to students that scored similarly in the previous year (his or her academic peer group).

The second question that needs to be answered is: ***What is a student percentile?***

The growth model compares each student's current achievement to students in the same grade throughout the state who had similar NECAP, MEA, or even PSAT, SAT and NWEA scores in the past year. This defines how much relative growth a student made.

The third question: ***What is an academic peer?***

As indicated above, academic peers are, in this case, students in a particular grade with similar assessment score (MEA, NECAP, NWEA, PSAT, and SAT) history. Comparing these academic peer groups enables the growth of a student to be measured as typical, high, or low in relation to one another.

The fourth and final question to be answered is: ***What is a median growth percentile?***

The median growth percentile is a summary of student growth rates by district, school, and grade level. It is calculated by taking individual student growth percentiles, of all students in that group, ordering them from least to greatest and identifying the middle score, the median. Medians are more appropriate to use than averages when making summaries about percentile scores. (i.e. 14, 15, 17, 20, 35, 40, **49**, 67, 78, 88, 90, 90, 93; **49** is the median growth percentile for this group).

We encourage you to discuss your child's achievement levels and growth in new and more challenging ways. Instead of "*How is my child doing?*" you can ask a teacher or principal more focused questions such as:

- ***What steps can we take since my child's growth in reading wasn't good enough, and they need to catch up?***
- ***Is my child's academic growth enough to keep them Proficient in math next year?***
- ***What will it take for my child to move up to Proficient With Distinction in writing next year?***

On our website, you'll find definitions, online help to refer to in conversations with your child, your child's teachers, and your school community. You will also find detailed explanations, videos, and interactive tools to help you explore all the exciting information that the Maine Growth Model provides.

Come and visit us at: http://dw.education.maine.gov/education/medw/default.aspx